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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/623,928

07/21/2003

Ulrich Posanski

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08/18/2009

NOVARTIS

CORPORATE INTELLECTUAL PROPERTY

ONE HEALTH PLAZA 104/3

EAST HANOVER, NJ 07936-1080

EXAMINER

FUBARA, BLESSING M

ART UNIT

PAPER NUMBER

1618

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/623,928	Applicant(s) POSANSKI, ULRICH	
	Examiner BLESSING M. FUBARA	Art Unit 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/28/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The examiner acknowledges receipt of IDS, request for continued examination under 37 CFR 1.114, request for extension of time, amendment and remarks, all filed 5/28/09. Claims 11 and 17 are amended. Claim 13 is canceled. Claims 11, 12 and 14-20 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/28/09 has been entered.
- 2.
3. Previous rejections that are not reiterated herein are withdrawn in view of the amendment to claims 11 and 17.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 11, 12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calne (US 5,212,155) and Posanski (GB 2 228 198 A) in view of Armistead et al. (US 5,192,773) and Kao (US 5,262,423).

6. Claims 11 and 17 have been amended to select the therapeutic agents from rapamycin, tacrolimus and mycophenolate-mofetil. Claim 13 which selected the therapeutic agent from cyclosporins, rapamycin, tacrolimus, deoxyspergualin, mycophenolate-mofetil, nifedipine, nimodipine, etoposide, and ibuprofen has been canceled.

The comprising language of claims 11 and 17 is open.

7. Calne discloses composition comprising rapamycin and pharmaceutically acceptable carriers including olive oil or alcohol or propylene glycol or surfactant such as cremophor for oral administration in the form of tablet, caplet or capsule (abstract; column 3, lines 63-66; column 4, lines 4-10) to inhibit transplant rejections (abstract; column 4, lines 32-34); Calne also discloses that rapamycin can be used in combination with cyclosporin and one or more chemotherapeutic agents (column 4, lines 18, 46-50).

8. Posanski discloses pharmaceutical composition that contains cyclosporine; carrier composition that contains oils, tenside having HLB of at least 10, triglycerides, natural oils and glycerol monooleate (abstract; page 7, third full paragraph; page 11, item A). Specifically, the components iii)-v), b and c of the composition of Posanski (page 7, 3rd full paragraph; page 11, under item A; page 18, under item B) are glycerides such as triglycerides (linoleic acid) and IMWITOR (pages 19-24) which have in the case of the fatty acid 6-22 carbons and have HLB of less than 10 in the case of the IMWITOR. An example of tenside having at least HLB of 10 is

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Miglyol 812 and Myrj 52 (see page 13, d.3; page 14, d.7; page 20, 1st full paragraph; examples 1 and 2).

9. Rapamycin and cyclosporin are known immunosuppressive agents that have been described to inhibit transplant rejections according to Kao at column 1, lines 41-49 and Armistead at column 12, lines 25 and 26.

10. The olive oil of Calne and the sesame oil of Posanski meet the limitation of claims 11 b), 16 and 17 b). The dosage form of capsule of Calne encompasses the dosage of claim 20 and capsules are known to be either soft or hard and Posanski contemplates formulation of soft or hard gelatin capsules (see example 2).

11. Posanski describes the carrier composition of claims 11, 14-17. For Calne, the rapamycin is administered in mg/kg/day (see for example claim 2) as the effective amount. For Posanski, the cyclosporine is present at varying amounts of 5-10% (page 8, 2nd full paragraph), 15-25% (page 9, 2nd full paragraph) or 2-20% (page 12, 3rd full paragraph). Thus, one having ordinary skill in the art would use either the mg/kg/day or the % amount which is encompassed in the recited amount of claim 12 that would be effective to provide inhibition of organs after transplantation. Since the therapeutic agent rapamycin is the same as claimed, the solubility parameters of less 500 mg/1000 or sparingly soluble as recited in claims 11, 12 and 17 are met. Items (b) or (c) of Posanski is at 25-50% meeting the a) of claims 11 and the (b) or (c) of Posanski meets the fatty acid requirement of claims 14, 15 and 19. The tenside having at least HLB of 10 meeting claim 11 c) 17 c) is about 33% in example 2 so that the % amount in claims 11 and 17 recited is obvious over the disclosed amount. When the tenside is Myrj 52, which has 40 ethylene oxide units, the requirement that the surfactant under c) has 15-60 ethylene oxide

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units as recited in claim 18 is met. Also, for claim 17, the sorbitan skeleton being esterified with 1-3 acid radicals of saturated or unsaturated carboxylic acids having even number of 8-20 carboxylic atoms is the process of forming the sorbitan. However, since Posanski teaches specific sorbitan, such as the palmitate, stearate, etc (see page 13, d.2), it flows that the sorbitan of Posanski would have the number of saturated or unsaturated carboxylic atoms recited in claim 17.

12. Posanski teaches the carrier composition of the claims with cyclosporine and not rapamycin active. Calne discloses composition comprising rapamycin, cyclosporine and one or more chemotherapeutic agents, olive oil or cremophor agent and does not contain the sorbitan of claims 11 a) and 17 a). Rapamycin and cyclosporine are known immunosuppressant agents that are used to inhibit organ transplant rejection. Therefore, taking the combined teachings of Calne and Posanski, one having ordinary skill in the art at the time the invention was made and guided by the teaching in the art (Kao and Armistead) that rapamycin and cyclosporine are known immunosuppressive agents that have been described to inhibit transplant rejections, would have reasonable expectation that composition comprising rapamycin and/or cyclosporine, tenside having at least HLB of 10 and those having HLB of less than 10, oils, and sorbitan surfactants would effectively inhibit organ rejection after transplant since rapamycin and cyclosporin are poorly soluble and made soluble by the carrier composition.

Response to Arguments

13. Applicant's arguments filed 05/28/09 as the arguments apply to the current rejections have been fully considered but they are not persuasive.

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14. Applicant argues that Posanski does not teach rapamycin as recited in current amended claims. The examiner agrees that Posanski does not teach rapamycin and that is the reason for withdrawing the rejection under 35 USC 102 and a rejection under 35 USC 103 is made with secondary references since rapamycin and cyclosporine are known immunosuppressive agents that have been described to inhibit transplant rejections.

Double Patenting

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 11, 12 and 14-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-19 of copending Application No. 10/961,785 in view of Armistead et al. (US 5,192,773) and Kao (US 5,262,423) and further in view of Posanski (GB 2 228 198 A).

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17. The presently amended claims 11 and 17 recite compositions comprising carrier composition and pharmaceutically active agent that is selected from rapamycin, tacrolimus and mycophenolate-mofetil. The copending claims are directed to compositions comprising same carrier composition and cyclosporine active agent. The difference between the examined claims and the co-pending claims is in the active agent. But, cyclosporin and rapamycin are both poorly soluble drugs. Secondly, it is known in the art that rapamycin and cyclosporin are known immunosuppressive agents that have been described to inhibit transplant rejections according to Kao at column 1, lines 41-49 and Armistead at column 12, lines 25 and 26. Further, Posanski uses surfactants to solubilize cyclosporine (see the whole document with emphasis in pages 7, 8, 11 and 13) and the surfactant composition meet the carrier composition of the co-pending claims and the examined claims. Therefore, the carrier composition of the copending claims can be used to effectively solubilize both cyclosporin and rapamycin for a composition that would be effective in inhibiting organ rejection after transplantation.

This is a provisional obviousness-type double patenting rejection.

18. Claims 11, 12 and 14-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-22 of copending Application No. 10/623887 respectively. An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim not is patentably distinct from the reference claim(s) because the examined claim is either anticipated, or would have been obvious, over the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010

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(Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). In the present case, claims 11 and 17 of the examined application read on at least claims 11, 13 of co-pending application 10/623,887. Co-pending dependent claims 12, 14-18, 20, 21, 22 are same as examined claims 12, 14-16, 18, 19, 20.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

19. Applicant's arguments filed 5/28/09 have been fully considered but they are not persuasive.

Applicant has indicated filing a terminal disclaimer when there is an indication of allowable subject matter and requests the rejection to be held in abeyance. But, the provisional obviousness type double patenting rejection is not the only rejection in the examined application and the rejection will continue to be made until the rejection is overcome as stated in MPEP 804 [R-5], I B, that "the "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patenting rejection is the only rejection remaining in at least one of the applications." As noted above, the provisional obviousness double patenting rejection is not the only rejection remaining in this examined application. Thus rejection is maintained and is not held in abeyance.

No claim is allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLESSING M. FUBARA whose telephone number is (571)272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Blessing M. Fubara/
Examiner, Art Unit 1618